

Evaluation Report for Category B, Subcategory 2.1, 2.3, 2.4 Application

Application Number: 2016-1753
Application: New Product Chemistry-Guarantee, New Product Chemistry-Identity of Formulants, New Product Chemistry-Proportion of Formulants
Product: Davai 80SL Herbicide
Registration Number: 32929
Active ingredients (a.i.): Imazamox
PMRA Document Number: 2745995

Purpose of Application

The purpose of this application was to register the end-use product, Davai 80SL Herbicide, to manage weeds in field peas and soybeans, using the PPIP process.

Chemistry Assessment

Davai 80SL Herbicide is formulated as a solution containing imazamox (present as ammonium salt) at a nominal concentration of 80 g/L. This end-use product has a density of 1.048-1.052 g/mL and pH of 5.5-6.5. The required chemistry data for Davai 80SL Herbicide have been provided, reviewed and found to be acceptable.

Health Assessments

Davai 80SL Herbicide was of low acute toxicity by the oral and dermal routes and of slight acute toxicity by the inhalation route in rats. It was mildly irritating to the eyes of rabbits and it was non-irritating to rabbit skin. It was not a dermal sensitizer in mice.

Davai 80SL Herbicide for use on soybeans and field peas to control labelled grasses and weeds fits within the registered use pattern for imazamox. The change in formulation type has the potential to increase exposure for mixer/loaders and therefore a quantitative risk assessment was conducted. No risks to human health are expected when workers follow the label directions and wear the personal protective equipment identified on the label. For field peas, a quantitative postapplication risk assessment was conducted and no risks to postapplication re-entry workers are expected from the use of Davai 80SL Herbicide.

No residue chemistry data were submitted in support of the registration of the new end-use product. The use pattern of Davai 80SL Herbicide was determined to be within that of the registered products. Therefore, the previously reviewed data were reassessed in the framework of the current submission and it was confirmed that the use of Davai 80SL Herbicide is not expected to result in an increase in the magnitude of imazamox residues in/on the treated crops. Therefore, the use of Davai 80SL Herbicide will not pose an unacceptable risk to any segment of the population, including infants, children, adults and seniors.

Environmental Assessment

Davai 80SL Herbicide is an end-use product with imazamox (present as ammonium salt) as the active ingredient. It is a selective post-emergence herbicide intended for use in field peas and soybeans for the control of labelled grass and broadleaf weeds in the Prairie Provinces and Interior of British Columbia. The new formulation of Davai 80SL Herbicide is not expected to pose additional environmental concerns with the proposed uses.

Value Assessment

The availability of Davai 80SL Herbicide will provide farmers the first liquid imazamox formulation to manage both grasses and broadleaf weeds in field peas and soybeans. Registration of a generic product may increase product competition in the marketplace, which may in turn reduce purchasing costs. Furthermore, there is a certain segment of growers who prefer liquid herbicide products.

Value information submitted included data from field research trials conducted in the Canadian prairies in 2013 and 2014. Value information demonstrated that Davai 80SL Herbicide was agronomically equivalent to the precedent products when they are applied in accordance with the label instructions. Value information also supported the addition of field pea as a host crop, and Phantom 240SL (Registration Number 30017) as a tank-mix partner on the Davai 80SL Herbicide label.

Conclusion

The Pest Management Regulatory Agency has completed an assessment of the information provided and is able to support the registration of the new end-use product, Davai 80SL Herbicide.

References

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2624804	2014, Imazamox 80 SL - Determination of Physio-Chemical Properties-Oxidizing Properties of Liquids, DACO: 3.5.8 CBI
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2624801	2015, Imazamox 80 SL - Determination of Physio-Chemical Properties-Auto-Ingition Temperature, DACO: 3.5.11
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2624780	2014, MANA-5A, Control of wild oats and BLW in Clearfield lentils with MANA imazamox vs. Solo, DACO: 10.2.3.3(B) and 10.3.2.
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